



Projects

- **Title:**
 - Porting DirectFB library on top of STM32 based boards
- **Type:** thesis
- **Objectives:**
 - Port DirectFB on STM32 boards
 - Support FreeRTOS
 - Implement the hw acceleration module to improve performance
 - Provide benchmarks figures (sw vs. hw accelerations)
- **Skills:**
 - Graphics theory libraries
 - Operating System (FreeRTOS)
 - Programming languages: C, C++
 - Libraries: DirectFB
- **Complexity:** medium/high
- **Reference:** www.directfb.org

Minimal Debugger IDE

- Title:
 - Eclipse based minimal debugger IDE
- Type: thesis
- Objectives:
 - Implement an Eclipse RCP providing a graphical environment to support the debugging of Linux kernel and Linux application on ST target boards
- Skills:
 - Eclipse framework and RCP application
 - GNU debugger (gdb)
 - Programming languages: Java, C
 - Tools: Eclipse (multicore debugging)
- Complexity: medium/high
- Reference: Data Display Debugger (<http://www.gnu.org/software/ddd>)

Multimedia application demo

- Title:
 - A *HTML-5* based multimedia player (no C code)
- Type: stage/thesis
- Objectives:
 - Provide a multimedia application (player) on WebKit framework (QtMediaHub)
- Skills:
 - Multimedia application development
 - GStreamer framework
 - OpenGL ES
 - Programming languages: HTML, HTML-5, CSS-3
 - Libraries: GTK
- Complexity: medium/high